

Claims

- [1] A supercapacitor which comprises two electrodes in which each of the two electrodes is comprised of a current collector and an electrode active material adhered to the current collector, a separator positioned between the two electrodes, an electrolyte and a package, wherein the current collector is a metal thin plate having a conductive metal oxide layer thereon and the electrode active material is adhered on a surface of the conductive metal oxide layer.
- [2] The supercapacitor as set forth in claim 1, wherein the conductive metal oxide layer is formed of a material selected from the group consisting of zinc oxide and tin oxide.
- [3] The supercapacitor as set forth in claim 1, wherein the conductive metal oxide layer is formed of zinc oxide.
- [4] The supercapacitor as set forth in claim 1, wherein the metal thin plate is an aluminum thin plate.
- [5] The supercapacitor as set forth in claim 1, wherein at least one of the two electrodes is obtained by dipping a metal thin plate into a solution into which a conductive metal oxide is dissolved, drying the obtained metal thin plate with hot wind in order to form a conductive metal oxide layer on the metal thin plate, and coating the metal thin plate having the conductive metal oxide layer thereon with a slurry containing an electrode active material, followed by drying and pressing to form an electrode active material layer on a surface of the conductive metal oxide layer.

INTERNATIONAL SEARCH REPORT

.....national application No.
PCT/KR2004/001990

A. CLASSIFICATION OF SUBJECT MATTER**IPC7 H01G 9/04**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 H01G 9/04, H01G 9/00, H01G 9/038, C25D 11/16, C25D 11/02,

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 60-182123 A (MATSUSHITA ELECTRIC IND CO.,LTD) 17 SEPTEMBER 1985	1,2,4
X	JP 01-227418 A (TAIYO YUDEN CO.,LTD) 11 SEPTEMBER 1989	1,2,4
X	JP 02-001104 A (TAIYO YUDEN CO.,LTD) 05 JANUARY 1990	1,2,4
X	JP 55-069291 A (MATSUSHITA ELECTRIC IND CO.,LTD) 24 MAY 1980	5
X	JP 55-058392 A (MATSUSHITA ELECTRIC IND CO.,LTD) 01 MAY 1980	5
X	JP 04-042519 A (TOYO ALUM KK) 13 FEBRUARY 1992	5
A	JP 06-045198 A (NIPPON CHEMICON CORP) 18 FEBRUARY 1994	1-5
A	JP 10-012503 A (MATSUSHITA ELECTRIC IND CO.,LTD) 16 JANUARY 1998	1-5
A	JP 14-324545 A (HITACHI MAXELL LTD) 08 DECEMBER 2002	1-5
A	US 6579327 A (LUXON ENERGY DEVICES CORP) 17 JUNE 2003	1-5

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

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"&" document member of the same patent family

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